



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,589	11/22/2002	Hans Zschintzsch	50029-00001	8347

7590 02/23/2006

Kenneth J Johnson
Marsh Fischmann & Breyfogle
Suite 411
3151 South Vaughn Way
Aurora, CO 80014

EXAMINER

RAMOS FELICIANO, ELISEO

ART UNIT	PAPER NUMBER
----------	--------------

2687

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/018,589	ZSCHINTZSCH, HANS	
	Examiner	Art Unit	
	Eliseo Ramos-Feliciano	2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 12, 2005 has been entered.

Previous Claim Objections

2. Previous objection to *claim 17* is withdrawn in view of Applicant's amendment filed December 12, 2005.

Claim Objections

3. **Claim 26** is objected to because of the following informalities: "and" should be added at the end of line 5 to link final step with the rest of claimed steps. Correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. **Claims 28 and 31** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 2687

With respect to **claim 28**, the limitation of “the translation includes performing authentication of a subscriber associated with the short message” is matter not found in the original disclosure. (See following Examiner’s Remark).

With respect to **claim 31**, the limitation of “the translation includes using a part of the short message to determine a routing instruction” is matter not found in the original disclosure. (See following Examiner’s Remark).

Claim Rejections - Examiner’s Remark

6. With respect to **all claims**: the newly added limitation “to translate the point-to-point short message into a cellular broadcast message” includes *translate*: a word not found in the original specification. In light of page 3, last paragraph, of the original disclosure (as pointed out by Applicant in page 6, second paragraph, of Applicant’s submission filed on December 12, 2005), for examination on the merits, the limitation *translate* is interpreted as to perform the necessary conversion(s) into a suitable format.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 26-31** are rejected under 35 U.S.C. 102(e) as being anticipated by Mukherjee et al. (US Patent Number 6,289,223).

Regarding **claim 26**, Mukherjee et al. discloses a method of providing a cellular broadcast center with a cellular broadcast message (column 2, lines 1-4, 10-13 & 32-36; column 1, line 48; title), comprising:

receiving a short message (column 2, line 45; column 3, line 65; column 4, line 60) from a short message center (SMS-IW MSC 16); (see column 3, lines 5-14);;

performing translation on the short message, wherein the translation includes converting the short message into a cellular broadcast message (“an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN” – abstract: therefore, the SMS message is translated into cellular broadcast message as claimed; see also column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6);

forwarding the cellular broadcast message to a cellular broadcast center (SMS-GMSC 20) (see column 3, lines 17-20).

Regarding **claim 27**, Mukherjee et al. discloses everything claimed as applied above (see *claim 26*). In addition, Mukherjee et al. discloses wherein the cellular broadcast center delivers the cellular broadcast message to all subscribers (usergroup) in communication with a mobile station associated with the cellular broadcast center (comparing and selecting multipoint usergroup) (see abstract; column 3, lines 20-25; column 4, line 59 to column 5, line 5).

Regarding **claim 28**, Mukherjee et al. discloses everything claimed as applied above (see *claim 26*). In addition, Mukherjee et al. discloses wherein “the translation” includes performing authentication of a subscriber associated with the short message (determining origination authentication – see column 3, lines 20-25; column 4, line 59 to column 5, line 5)

Regarding **claim 29**, Mukherjee et al. discloses everything claimed as applied above (see *claim 26*). In addition, Mukherjee et al. discloses wherein the forwarding is performed through a process valid for transmitting cellular broadcast messages (column 3, lines 17-20: “forwarding”, as taught by Mukherjee et al., is in fact a process. The process/forwarding is fairly characterized as “valid”).

Regarding **claim 30**, Mukherjee et al. discloses everything claimed as applied above (see *claim 26*). In addition, Mukherjee et al. discloses wherein translation includes formatting the short message (“an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN” – abstract: therefore, the SMS message is translated or formatted; see also column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6).

Regarding **claim 31**, Mukherjee et al. discloses everything claimed as applied above (see *claim 26*). In addition, Mukherjee et al. discloses wherein the translation includes using a part of the short message to determine a routing instruction (SMS message is encapsulated with MSISDN of destination users, which is routing information/instruction – column 6, lines 30-53; particularly lines 40-45; also see column 3, line 15) (message is addressed to group: i.e. used to determine routing instruction. See abstract; column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2687

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 12-14, 18-19, 21/18, 21/19/18, and 23-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al. (US Patent Number 6,289,223).

Regarding **claim 12**, Mukherjee et al. discloses a process of allowing direct access for individual subscribers to a cellular phone network (Figure 1) with existing cell broadcast services (column 2, lines 1-4, 10-13 & 32-36; column 1, line 48; title), the process comprising:

accepting a point-to-point short message from a cellular phone (12) equipped to exchange point-to-point short messages (column 2, line 45; column 3, line 65; column 4, line 60) with a short-message center (SMS-IW MSC 16) over a cellular phone network (10 - Figure 1), (see column 3, lines 5-14);

providing a coupling instance (SC 18) interconnectable with the short-message center (SMS-IW MSC 16); (see column 3, lines 15-20);

doing at least one of: a test (determines destination / subscriber status), an adjustment (parses the messages) and a conversion (deciphers the messages) of the point-to-point short message necessary to translate the point-to-point short message into a cellular broadcast message in the coupling instance (SC 18) (see column 3, lines 20-25; column 4, line 59 to column 5, line 5); [“an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN” – abstract: therefore, the SMS message is translated into cellular broadcast message as claimed; see also column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6]; and

forwarding the cellular broadcast message to a cell broadcast center (SMS-GMSC 20) by means of a process (e.g. forwarding) that applies to the cell broadcast center (see column 3, lines

Art Unit: 2687

17-20); [Forwarding, as taught by Mukherjee et al., is in fact a process. Thus the limitation “by means of a process that applies to the cell broadcast center” is inherent, since such process is needed for the system to operate, and it has to be applicable to the cell broadcast center because it is the one receiving the forwarded messages].

However, Mukherjee et al. fails particularly disclose that the network is a *digital* cellular phone network, as claimed.

In the background of the invention, Mukherjee et al. teaches several different digital-based telecommunications systems, such as GSM and PCS, that provide non-speech services to mobile subscribers, such as short message services (see column 1, lines 30-40). Consequently, Mukherjee et al. suggests to apply their improved SMS service in a digital cellular phone network, such as GSM.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement Mukherjee et al.’s short message method in a digital cellular phone network because digital-based standards, like GSM, are widely used; hence, an increased number of users can benefit from the service.

Regarding **claim 13**, Mukherjee et al. discloses everything claimed as applied above (see *claim 12*). In addition, Mukherjee et al. discloses wherein a parameter (group identifier or usergroup MSISDN) for using cell broadcast is given by the subscriber (user) in the point-to-point short message (the user enters the group identifier when initiating the SMS transmission – column 2, lines 13-21 & 24-27; column 3, lines 55-56).

Regarding **claim 14**, Mukherjee et al. discloses everything claimed as applied above (see *claim 12*). In addition, Mukherjee et al. discloses wherein a parameter for using cell broadcast is

Art Unit: 2687

predetermined (beforehand / prior arrangements – column 4, lines 49-53) and are added to the broadcast message by the coupling instance (SC 18) (column 3, lines 20-25; column 4, line 67 to column 5, line 2).

Regarding **claim 18**, Mukherjee et al. discloses a device for allowing direct access for individual subscribers to a cellular phone network (Figure 1) with existing cell broadcast services (column 2, lines 1-4, 10-13 & 32-36; column 1, line 48; title), wherein the cellular phones (12) of the subscribers (users) are equipped to exchange point-to-point short messages (column 2, line 45; column 3, line 65; column 4, line 60) with a short-message center (SMS-IW MSC 16) over the cellular phone network (10 - Figure 1), (see column 3, lines 5-14), whereby short messages declared cell broadcast messages (“an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN” – abstract; column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6) are forwarded to a cell broadcast center (SMS-GMSC 20), (see column 3, lines 15-20), the device comprising:

a coupling instance (SC 18) connected to a short message center (SMS-IW MSC 16), which accepts (column 3, lines 14-16; see also Figure 1) point-to-point short message (column 2, line 45; column 3, line 65; column 4, line 60); and

means of doing (inherent) at least one of: a test (for determining destination and subscriber status), an adjustment (for parsing the messages), and a conversion (for deciphering the messages) of the point-to-point short message necessary to translate the point-to-point short message into a cellular broadcast message (see column 3, lines 20-25; column 4, line 59 to column 5, line 5) (“means of doing” inherent from the explained function) [“an originating

Art Unit: 2687

mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN” – abstract: therefore, the SMS message is translated into cellular broadcast message as claimed; see also column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6];

wherein the coupling instance (SC 18) is connected to a cell broadcast center (SMS-GMSC 20) to which the translated message is forwarded (see column 3, lines 17-20).

However, Mukherjee et al. fails particularly disclose that the network is a *digital* cellular phone network, as claimed.

In the background of the invention, Mukherjee et al. teaches several different digital-based telecommunications systems, such as GSM and PCS, that provide non-speech services to mobile subscribers, such as short message services (see column 1, lines 30-40). Consequently, Mukherjee et al. suggests to apply their improved SMS service in a digital cellular phone network, such as GSM.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement Mukherjee et al.’s short message method in a digital cellular phone network because digital-based standards, like GSM, are widely used; hence, an increased number of users can benefit from the service.

Regarding **claim 19**, Mukherjee et al. discloses everything claimed as applied above (see *claim 18*). In addition, Mukherjee et al. discloses wherein the point-to-point short messages contain parameters (group identifier or usergroup MSISDN) for defining the broadcast area (see column 2, lines 13-21 & 24-27; column 3, lines 55-56) and, if necessary, other parameters (for example, origination related data, etc. – column 3, lines 21-24).

Regarding **claim 21/18 and 21/19/18**, Mukherjee et al. discloses everything claimed as applied above (see *claim 18-19*). In addition, Mukherjee et al. discloses wherein a filter component (for comparing and selecting multipoint usergroup) is provided in the coupling instance (SC 18) (see column 3, lines 20-25; column 4, line 59 to column 5, line 5) (“component” is inherent from the respective explained functions).

Regarding **claim 23**, Mukherjee et al. discloses everything claimed as applied above (see *claim 12*). In addition, Mukherjee et al. discloses filtering (comparing and selecting multipoint usergroup) the point-to-point short message based on a subscriber associated with the cellular phone (see column 3, lines 20-25; column 4, line 59 to column 5, line 5).

Regarding **claims 24-25**, Mukherjee et al. discloses everything claimed as applied above (see *claims 12 and 18*). In addition, Mukherjee et al. discloses wherein the point-to-point short message is declared as an intended cellular broadcast message by a subscriber associated with the cellular phone (“an originating mobile unit may then transmit an SMS message to a plurality of destination units by transmitting an SMS message addressed to a predefined usergroup MSISDN” – abstract; column 2, lines 10-21 & 24-26; column 4, lines 3-6; column 7, lines 4-6).

In addition: claims 24-25 include a recitation of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

11. **Claims 15/12, 15/13/12, and 15/14/12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al. (US Patent Number 6,289,223) in view of Sikand et al. (US Patent Number 5,515,421).

Regarding **claims 15/12, 15/13/12, and 15/14/12**, Mukherjee et al. discloses everything claimed as applied above (see *claims 12-14*). However, Mukherjee et al. fails to specifically disclose that the area to which the cellular broadcast message applies is determined by giving the dialing prefix, the postal code or the vehicle license number, as claimed.

Sikand et al. discloses a message broadcasting method wherein callers (area to which the broadcast message applies) are identified according to a one or more common defined characteristics, such as, area code (dialing prefix), zip code (postal code), or any other caller characteristics or codes (for example, vehicle license number) (see column 1, lines 50-54 & 61-67). For example, if the broadcast message is local weather the caller identification would be the zip code (postal code) (column 2, lines 1-3, and column 3, lines 1-5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to determine the area to which the cellular broadcast message applies by using a dialing prefix, a postal code or a vehicle license number, because the information can be, for example, geographically dependent, such as local weather, in which case the information is pertinent for a particular zip code group, as taught by Sikand et al.

12. **Claims 16/12, 16/13/12, 16/14/12, 17/12, 17/13/12, 17/14/12, 20/18, 20/19/18, 22/18 and 22/19/18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al. (US Patent Number 6,289,223) in view of Vedel (US Patent Number 5,974,308).

Regarding **claims 20/18, 20/19/18, 22/18 and 22/19/18**, Mukherjee et al. discloses everything claimed as applied above (see *claims 18-19*). However, Mukherjee et al. fails to specifically disclose an accounting instance / billing entity provided in the coupling instance, as claimed.

Vedel discloses message broadcasting apparatus wherein accounting instance / billing entity provided for the purpose of informing users a rate of charge (see abstract; column 3, lines 15-35 of Vedel). Since the coupling instance (SC 18 of Mukherjee et al.) performs most of the short-message service processing (column 3, lines 20-24; column 4, lines 53 and 67 to column 5, line 10, *inter alia*, of Mukherjee et al.), it would have been obvious to also perform the needed accounting / billing process since its location is not critical, as it can be seen from Vedel.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Mukherjee et al.'s device with an accounting instance / billing entity provided in the coupling instance, because, first, it is needed for the purpose of selling the broadcast services, and, second, it can be used to inform users a rate of charge, as taught by Vedel.

Regarding claims 16/12, 16/13/12, 16/14/12, 17/12, 17/13/12, and 17/14/12, Mukherjee et al. discloses everything claimed as applied above (see *claims 12-14*). However, Mukherjee et al. fails to specifically disclose an accounting methods as claimed. However, provision of these accounting methods is obvious expedient in view of Vedel as explained for claims 20 and 22 above, explanation that is applied and incorporated herein by reference.

Response to Arguments

13. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Any inquiry concerning this communication from the examiner should be directed to Eliseo Ramos-Feliciano whose telephone number is 571-272-7925. The examiner can normally be reached from 8:00 a.m. to 5:30 p.m. on 5-4/9 1st Friday Off.

Art Unit: 2687

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ELISEO RAMOS-FELICIANO
PATENT EXAMINER

ERF/erf

February 18, 2006